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| APPLICATION NO.        | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |  |
|------------------------|-----------------|----------------------|---------------------|-----------------|--|
| 10/767,689             | 01/29/2004      | Craig L. Hill        | 50508-1061          |                 |  |
| 24504                  | 7590 02/22/2006 |                      | EXAMINER            |                 |  |
| •                      | KAYDEN, HORSTEM | PAK, JOHN D          |                     |                 |  |
| STE 1750               | JA PARKWAY, NW  |                      | ART UNIT            | PAPER NUMBER    |  |
| ATLANTA, GA 30339-5948 |                 |                      | 1616                |                 |  |

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | A  | pplication No.   | Ap  | oplicant(s)  |         |  |  |
|---|---|--|--|---|--|---------|--|--|
| Office Action Summary                                 |   | 1  | 0/767,689  | н   | LL ET AL.  |         |  |  |
|   |   | E  | xaminer  | Ar  | t Unit   |         |  |  |
|   |   | Jo   | OHN PAK  | 16  | 16   |         |  |  |
| Period fo   | The MAILING DATE of this commun<br>or Reply   | nication appear  | s on the cover sheet   | with the corre  | espondence ad                                      | idress  |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD F<br>CHEVER IS LONGER, FROM THE IN<br>asions of time may be available under the provisions<br>SIX (6) MONTHS from the mailing date of this com-<br>period for reply is specified above, the maximum so<br>re to reply within the set or extended period for reply<br>reply received by the Office later than three monthsoled patent term adjustment. See 37 CFR 1.704(b). | MAILING DATE<br>s of 37 CFR 1.136(a)<br>munication.<br>tatutory period will ap<br>y will, by statute, caus | OF THIS COMMUI In no event, however, may only and will expire SIX (6) M se the application to become | NICATION.  TO A reply be timely find the new ABANDONED (35) | iled<br>nailing date of this c<br>5 U.S.C. § 133). |         |  |  |
| Status  |   |  |  |   |  |         |  |  |
| 1)  | Responsive to communication(s) file   | ed on  |  |   |  |         |  |  |
| 2a)□  | •   |  | tion is non-final.   |   |  |         |  |  |
| 3)  | , <del>' -</del>  |  |  |   |  |         |  |  |
|   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |  |   |  |         |  |  |
| Dispositi   | on of Claims  |  |  |   |  |         |  |  |
| 4)⊠   | Claim(s) 57-62 is/are pending in the  | application.   |  |   |  |         |  |  |
|   | 4a) Of the above claim(s) is/a  | are withdrawn f  | from consideration.  |   |  |         |  |  |
| ·   | Claim(s) is/are allowed.  |  |  |   |  |         |  |  |
| _   |   |  |  |   |  |         |  |  |
| 7)∐   | Claim(s) is/are objected to.  |  |  |   |  |         |  |  |
| 8)[2]   | Claim(s) <u>57-62</u> are subject to restric  | xion and/or ele  | ection requirement.  |   |  |         |  |  |
| Applicati   | on Papers   |  |  |   |  |         |  |  |
| 9)□   | The specification is objected to by the   | ne Examiner.   |  |   |  |         |  |  |
| 10)   | The drawing(s) filed on is/are  | : a)□ accepte  | ed or b) Objected t  | to by the Exa   | miner.   |         |  |  |
|   | Applicant may not request that any obje   |  |  |   |  |         |  |  |
| 44)   | Replacement drawing sheet(s) including  | _  | ·  |   |  | • •     |  |  |
| ,   | The oath or declaration is objected t   | o by the Exam  | iner. Note the attacr  | ied Office Act  | tion or form P                                     | 10-152. |  |  |
| Priority (  | ınder 35 U.S.C. § 119   |  |  |   |  |         |  |  |
|   | Acknowledgment is made of a claim<br>☑ All b)☑ Some * c)፴ None of:  | for foreign pri  | ority under 35 U.S.C   | s. § 119(a)-(d)   | or (f).  |         |  |  |
|   | 1. Certified copies of the priority documents have been received.   |  |  |   |  |         |  |  |
|   | 2. Certified copies of the priority   |  |  | • •   |  |         |  |  |
|   | 3. Copies of the certified copies   | , ,  |  | en received ir  | n this National                                    | Stage   |  |  |
| * 0   | application from the Internation  See the attached detailed Office action   | •  | • • •  | at raceived   |  |         |  |  |
|   | see the attached detailed Office action   | אוווטו מ ווגנ טו נ   | ne certined copies in  | ot received.  |  |         |  |  |
| Attachmen   | t(s)  |  |  |   |  |         |  |  |
| 1) Notic  | e of References Cited (PTO-892)   |  |  | w Summary (PT   |  |         |  |  |
|   | e of Draftsperson's Patent Drawing Review (F<br>nation Disclosure Statement(s) (PTO-1449 or   |  |  | lo(s)/Mail Date<br>of Informal Paten                        |  | O-152)  |  |  |
| •   | r No(s)/Mail Date   | 1 10/30/00)  | 5) Notice of Informal Patent Application (PTO-152) 6) Other:   |   |  |         |  |  |

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is phosphorus.
- II. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is sulfur.
- III. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is silicon.
- IV. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is aluminum.
- V. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is boron.
- VI. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is zinc.
- VII. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is cobalt.
- VIII. Claims 58-59, drawn to a polyoxometalate-modified fabric and article comprising said fabric, wherein X is iron.

Classification of each of the inventions spans multiple subclasses in Class 424, subclasses 600 to 724, as well as 424/400+, due to the various different elements that are possible for the formulas in claims 58-59.

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Claims 57, 60-62 link inventions I, II, III, IV, V, VI, VII and VIII. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claims, claims 57 and 60-62. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104 Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim(s) including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. In re Ziegler, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Each of the eight inventions as set forth above is distinct, each from the others, by virtue of divergent chemical formulas. Any one of the above invention groups already represents sufficient burden in terms of search and examination. It is a rather

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demanding task to search all the multiple permutations that are possible for each invention group formula, and there is no efficient way of culling through the extensive prior art collection to discern relevant documents that may potentially disclose the claimed polyoxometalates. Therefore, to search and examine more than one invention group as set forth above would place an undue burden on the Examiner if the restriction were not required.

A telephone call was made to Mr. Linder on 2/6/2006 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

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unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is (571)272-0620. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Gary Kunz, can be reached on (571)272-0887.

The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOHN PAK PRIMARY EXAMINER GEOUP 1/60